



Doc Code: AP.PRE.REQ

PTO/SB/33 (07-05)

Approved for use through xx/xx/200x. OMB 0651-00xx

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**PRE-APPEAL BRIEF REQUEST FOR REVIEW**

Docket Number (Optional)

9084.ALG.US.P

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" [37 CFR 1.8(a)]

on August 24, 2007

Signature

Typed or printed name Emilie Benschoter

Application Number

10/786,759

Filed

February 24, 2004

First Named Inventor

Amir ABOLFATHI

Art Unit

3732

Examiner

Melba N. Bumgarner

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).

Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor.☐ assignee of record of the entire interest.  
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed.  
(Form PTO/SB/96)☒ attorney or agent of record.  
Registration number 35,398☐ attorney or agent acting under 37 CFR 1.34.

Registration number if acting under 37 CFR 1.34

Signature

John P. Wagner, Jr.

Typed or printed name

408-377-0500

Telephone number

August 24, 2007

Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below\*.

☐ \*Total of forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.



REMARKS ACCOMPANYING PRE-APPEAL BRIEF REQUEST FOR REVIEW

In response to the Final Office Action mailed June 14, 2007, Applicants respectfully request a review of the final rejection in the above-identified application. While only certain arguments are addressed in these Remarks, this should not be construed that Applicants agree with the other arguments presented in the Final Office Action.

Claims 34-45 are pending. Of these claims, Claims 34-39 are withdrawn from consideration and Claims 40-45 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 5,242,304 to Traux et al. (hereinafter "Traux") in view of U.S. Patent 6,463,334 to Pavloskaia et al. (hereinafter "Pavloskaia"), and further in view of U.S. Patent Publication 2004/0009449 to Mah et al. (hereinafter "Mah"). Applicants respectfully submit that the Office Action's rejection of Claims 40-45 is improper as the rejection does not satisfy the requirements of a *prima facie* case of obviousness, in that the Rejection is not factually supported and not every element of the claims is taught or suggested by the combination of cited references.

REJECTION DOES NOT ESTABLISH A *PRIMA FACIE* CASE OF OBVIOUSNESS

Attention is respectfully directed to Claim 40, which recites that an embodiment is directed to (emphasis added):

A method for expanding the palatal arch of a patient while repositioning teeth, the method comprising:  
acquiring at least one digital image representing at least a portion of upper teeth and a palate of the patient;  
fabricating a first portion of a palatal arch expander;  
fabricating a second portion of the arch expander;  
the first and second portion each having a plurality of cavities for receiving posterior teeth on its respective side of the palate and a palatal portion extending toward a centerline of the palate, the plurality of cavities forming a geometry shaped according to the at least one digital image that captures at least some of the patient's teeth, the plurality of cavities to receive the patient's posterior teeth, to secure the appliance to the patient, and to resiliently reposition the teeth from one tooth arrangement to a successive tooth arrangement;  
coupling an expansion member between the first and second portions;  
wherein the expansion member comprises at least one elastic band and at least one holder;  
placing the arch expander in the patient's mouth; and

adjusting the expansion member on a periodic basis to vary the spacing between the first and second portions to expand the patient's palatal arch while repositioning the teeth.

Claims 41-41 depend from independent Claim 40 and recite further features to this independent Claim.

#### Rejection Does Not Meet Burden of Factual Sufficiency

According to MPEP 2142, "[t]he legal concept of *prima facie* obviousness is a procedural tool of examination which applies broadly to all arts. It allocates the burden of going forward with production of evidence in each step of the examination process." Further, as recited in MPEP 2142, "[t]he examiner bears the initial burden of factually supporting any *prima facie* conclusion of obviousness. If the examiner does not produce a *prima facie* case, the applicant is under no obligation to submit evidence of nonobviousness," (emphasis added).

The Rejection indicates, "Traux et al. and Pavloskaia et al. further do not show the expansion member comprising at least one elastic band and at least one holder," (see rejection of 06/14/2007, page 3, lines 11-12). Applicants agree, and submit that an expansion member which "comprises at least one elastic band," as recited in Claim 40, is not taught or suggested by Traux or Pavloskaia either alone or in combination. The Rejection additionally indicates, "Mah et al. teach a palatal expander having expansion member comprising at least one elastic band 58 and at least one holder 54 (figure 1F) as well as the expansion member of Traux et al. (figure 9D)," (emphasis added; see rejection of 06/14/2007, page 3, lines 13-15). Applicants respectfully disagree. Moreover, Applicants submit that this assertion regarding the teaching of Mah is factually incorrect. For example, mechanism 58 as shown Figures 1A, 1B, 1E, 1F, 3A, and 8 does not comprise a band (elastic or otherwise) but rather an double ended wire like mechanism with prongs on each end. For example, as described in paragraph 46 of Mah (emphasis added),

[e]xpansion mechanism 58 generally follows the contour of the patient's palatal cavity and loop 61 is a semi-oval shape located approximately midway between prongs 60. ... Preferably, expansion mechanism 58 is constructed from 0.036 inch diameter stainless steel. Alternatively, expansion mechanism 58 is constructed from nickel-titanium, titanium alloy, or plastic. Preferably, expansion mechanism

58 is removable from holes 56 and is held in place due to friction between prongs 60 and material 57 that surrounds holes 56.

Applicants submit that the cited text above from Mah clearly indicates that Mah does not teach an elastic band as purported by the Rejection (see cited section reproduced above), but rather a double ended wire like mechanism with prongs on each end.

As such, Applicants submit that Claim 40 is allowable over the 35 U.S.C. §103(a) rejection to Traux in view of Pavloskaia and further in view of Mah, because the Office Action has failed to meet the initial burden of factually supporting a *prima facie* case of obviousness. Accordingly, the Applicants also respectfully submit that Claims 41-45 dependent on Claim 40 are allowable over the 35 U.S.C. §103(a) by virtue of their dependency on allowable base claim 40.

#### Claimed Feature is Not Taught or Suggested by Cited References

The Rejection indicates, “Traux et al. and Pavloskaia et al. further do not show the expansion member comprising at least one elastic band and at least one holder,” (see rejection of 06/14/2007, page 3, lines 11-12). Applicants submit that no expansion member which “comprises at least one elastic band,” is shown or suggested in Mah (which is relied upon by the Office Action to teach this feature of Claim 40). Further, Applicants submit that no portion of Mah, taken alone or in combination with Traux and Pavloskaia, teaches or suggests an expansion member which “comprises at least one elastic band,” as recited in Claim 40. According to MPEP 2142, “[t]o establish a *prima facie* case of obviousness...the prior art reference (or references when combined) must teach or suggest all the claim limitations.” Applicants submit that the present Office Action has failed to teach all features recited in Claim 40, and thus has failed to establish a *prima facie* case for obviousness of the claimed features recited in Claim 40.

As such, for this additional reason, Applicants submit that Claim 40 is allowable over the 35 U.S.C. §103(a) rejection to Traux in view of Pavloskaia and further in view of Mah, because, as described above, at least one claim feature is not taught or suggested by Traux, Pavloskaia, or Mah, either alone or in combination. Accordingly, the Applicants also respectfully submit that Claims 41-45 dependent on Claim 40 are allowable over the 35 U.S.C. §103(a) by virtue of their dependency on allowable base claim 40.